

DOCUMENT RESUME

ED 111 261

HE 006 632

AUTHOR Butler, Richard P.
TITLE Comparison of USMA Graduates from the Class of 1950 with Graduates from Other Colleges on Selected Variables (A Product Appraisal Report).
INSTITUTION Military Academy, West Point, N.Y. Office of Institutional Research.
REPORT NO OB3.00-72-021
PUB DATE Nov 71
NOTE 69p.
EDRS PRICE MF-\$0.76 HC-\$3.32 Plus Postage
DESCRIPTORS Citizenship Responsibility; *College Graduates; Comparative Analysis; *Educational Assessment; *Higher Education; Institutional Role; Leadership Qualities; Military Personnel; *Military Schools; *Military Training; Questionnaires; Social Responsibility
IDENTIFIERS *United States Military Academy

ABSTRACT

The responses of USMA graduates from the Class of 1950 are compared with those of graduates from civilian colleges on a number of topics of current interest. Most of the topics dealt with many of the goals of education which are obtainable and observable only in adult life. The questionnaire that was used consisted of seven major sections: background information, activities, changing society, viewpoints, educational benefits, memory of college experiences, and personal traits. The respondents to the mailed questionnaire were divided into five groups: USMA graduates still on active duty; USMA graduates not on active duty; the total number of USMA graduates responding; graduates from eight civilian engineering and science schools; and graduates from 74 civilian colleges and universities. In general, it appears that the USMA graduate compares favorably, if not more favorably, with graduates from civilian colleges and universities on most of the topics analyzed. It is noted that the typical USMA graduate feels that he has benefited more by going to college than does the graduate from a civilian institution of higher education. It is cautioned that any interpretations of these results must be made in conjunction with the goals, philosophies, values, and beliefs of USMA and the other colleges, since they may vary from institution to institution. (Author/LBH)

* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *

PERMISSION TO REPRODUCE THIS COPY-
RIGHTED MATERIAL HAS BEEN GRANTED BY

*U.S. Military
Academy*

TO ERIC AND ORGANIZATIONS OPERATING
UNDER AGREEMENTS WITH THE NATIONAL IN-
STITUTE OF EDUCATION. FURTHER REPRO-
DUCTION OUTSIDE THE ERIC SYSTEM RE-
QUIRES PERMISSION OF THE COPYRIGHT
OWNER.

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRO-
DUCED EXACTLY AS RECEIVED FROM
THE PERSON OR ORGANIZATION ORIGIN-
ATING IT. POINTS OF VIEW OR OPINIONS
STATED DO NOT NECESSARILY REPRESENT
OFFICIAL NATIONAL INSTITUTE OF
EDUCATION POSITION OR POLICY.

SCOPE OF INTEREST NOTICE

The ERIC Facility has assigned
this document for processing
to:

HE

TM

In our judgment, this document
is also of interest to the clearing-
houses noted to the right. Index-
ing should reflect their special
points of view.

UNITED STATES MILITARY ACADEMY

WEST POINT · NEW YORK

COMPARISON OF
USMA GRADUATES
FROM THE CLASS OF 1950
WITH GRADUATES
FROM OTHER COLLEGES
ON SELECTED VARIABLES .
(A Product Appraisal Report)

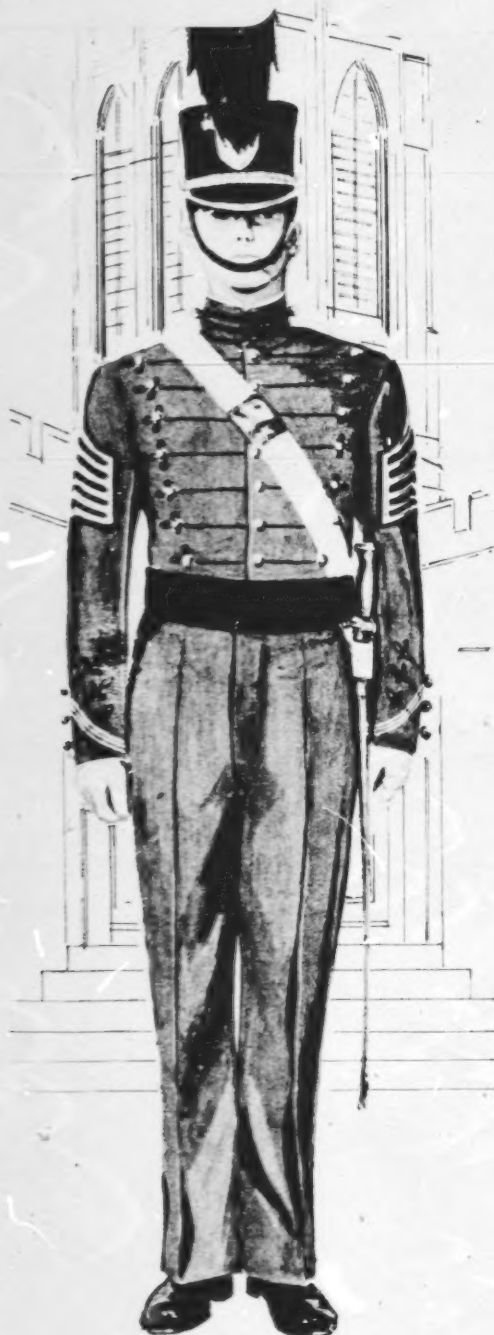
OFFICE OF
INSTITUTIONAL RESEARCH

NOVEMBER 1971

DUTY-HONOR-COUNTRY

ED111261

HE 006 632



COMPARISON OF USMA GRADUATES FROM THE CLASS OF 1950 WITH
GRADUATES FROM OTHER COLLEGES ON SELECTED VARIABLES

OB3.00-72-021

Report Prepared By: Dr. Richard P. Butler

November 1971

NOTE: Any conclusions in this report are not to be construed as official U.S. Military Academy or Department of the Army positions unless so designated by other authorized documents.

DISTRIBUTION: This document is prepared for official purposes only. Its contents may not be reproduced or distributed (in whole or in part) without specific permission of the Superintendent, U.S. Military Academy, in each instance.

OFFICE OF INSTITUTIONAL RESEARCH
UNITED STATES MILITARY ACADEMY
WEST POINT, NEW YORK 10996

FOREWORD

The USMA Product Appraisal Project was initiated in 1961 in order to assess the success of the Military Academy in preparing its graduates for a military career. This assessment of college impact, or educational "accountability," is one of the central themes in educational research today. The methodological problems associated with measuring educational impact are many and varied. The current state-of-the-art dictates that such research concern itself more with the consequences of higher education rather than its objectives, and the investigative style is necessarily exploratory in nature. A thorough assessment of the USMA as an institution would be a mammoth undertaking requiring many years of investigation by a large research staff. In fact, at one time (1965) a task force of eight personnel and a budget of over \$576,000 was envisioned for this purpose at West Point. However, for budgetary and other reasons this plan was never implemented. Consequently, Product Appraisal research was virtually dormant from 1965 until June 1970 when a researcher was made available for that project on a full-time basis. Although several reports have been produced during the past year, this one is unique in that comparative data are available from a large number of other institutions.

The reader interested in a summary of the methodological problems associated with the evaluation of educational impact is referred to the short monograph published by the College Entrance Examination Board: Accountability in Higher Education by Rodney T. Hartnett of the Educational Testing Service (1971).

Colonel Gerald W. Medsger
Director of Institutional Research

TABLE OF CONTENTS

	Page
FOREWORD	i
ABSTRACT	v
INTRODUCTION	1
METHOD	1
Subjects.	1
Questionnaire	2
Procedure	3
Procedural Caution.	4
RESULTS.	5
Background Information.	5
Activity Scales	6
Changing Society.	8
Viewpoints.	8
Educational Benefits.	9
Memory of College Experiences	9
Personal Traits	9
SUMMARY.	10
APPENDIX A	13
Alumni Survey	15
APPENDIX B	35
Tables 1 through 31	37

ABSTRACT

The purpose of this study was to compare the responses of USMA graduates from the Class of 1950 with those of graduates from civilian colleges on a number of topics of current interest. Most of the topics dealt with many of the goals of education which are obtainable and observable only in adult life. The questionnaire that was used to gather data on these goals of education and other information consisted of the following seven major sections: background information, activities, changing society, viewpoints, educational benefits, memory of college experiences, and personal traits. The respondents to the mailed questionnaire were divided into five groups: USMA graduates still on active duty; USMA graduates not on active duty; the total number of USMA graduates who responded to the questionnaire; graduates from eight civilian engineering and science schools; and graduates from 74 civilian colleges and universities. Analysis of the results shows that although the groups have very similar response patterns to some items, their responses on other items were often markedly distinct. Generally speaking, it appears that the USMA graduate compares favorably, if not more favorably, with graduates from civilian colleges and universities on most of the topics that were analyzed. It is especially noteworthy to report the finding that the typical USMA graduate feels that he has benefited more by going to college than does the graduate from a civilian institution of higher education. It is cautioned that any interpretations of these results must be made in conjunction with the goals, philosophies, values, and beliefs of USMA and the other colleges, since they may vary from institution to institution.

INTRODUCTION

One of the aims of the Product Appraisal Project, which was established by General William C. Westmoreland in 1961, is to survey periodically United States Military Academy (USMA) graduates on questions pertaining to their school experiences, current activities, and attitudes toward various issues of current interest. The purpose of the present study is intended to fulfill partially this aim by surveying USMA graduates from the Class of 1950 and then comparing their responses with those of graduates from other colleges and universities from the Class of 1950 in regard to some background information, activities, awareness and attitudes toward the changing society, viewpoints, educational benefits, memories of college experiences, and personal traits. As such, this study deals with many of the long range goals of education which are obtainable and observable only in adult life; and that it is therefore useful and relevant to be concerned about activities, opinions, and judgments of USMA's alumni.

METHOD

Subjects

The subjects consisted of 5981 male graduates of 75 colleges and universities from the Class of 1950. Of this total, 330 were USMA graduates, and 5651 were graduated from schools other than USMA. For the USMA sample, the respondents were divided into three groups: those graduates who were still on active duty (USMA AD); those not on active duty (USMA NAD); and the total number of USMA graduates who responded to the questionnaire, including the first two groups and also those respondents who could not be classified as either on active duty or not on active duty because of a clerical difficulty* (USMA Total).

For the USMA total group, 567 questionnaires were mailed, and the 330 usable returns represented a response rate of about 60 percent. For the other two USMA groups it is impossible to determine the exact response rates because a proportion of each, in all probability, was included in the USMA total group but could not be separated out as either on active duty or not on active duty because of the clerical difficulty. The N of 39 for the not on active duty group is relatively quite small, and it is possible that some sampling bias may be present in its responses. At the time the questionnaires were sent, there were approximately 160 graduates from the Class of 1950 who were no longer on active duty and whose addresses were available. The 39 respondents who could be classified as not on active duty thus represent around 25 percent of this group. It must also be noted that respondents not on active duty have left the profession for which their Military Academy education had prepared them. A comparative group of civilian college graduates who switched occupations is not available. Therefore, conclusions drawn from the not on active

*The clerical difficulty was caused by the fact that roughly 47 percent of the respondents failed to fill in their identification numbers in the spaces provided for them. The identification number allowed the respondents to be classified on active duty or not on active duty.

duty group should be made with extreme caution.

For the graduates of the 74 civilian colleges and universities involved in the present study, a total of 9,411 questionnaires were mailed, and the 5651 usable returns represent a response rate of 60 percent. For purposes of analysis, the respondents from the civilian institutions were divided into two groups: graduates from eight engineering and science schools (engineering and science), and the total number of graduates from the 74 civilian schools combined (national norm).

Questionnaire

Data for this study were gathered by means of a questionnaire (see Appendix A) developed at the Research and Development Center (Center for the Study and Evaluation) at UCLA. Dr. C. Robert Pace, Professor of Higher Education, had the major responsibility in preparing the questionnaire. The survey questionnaire consisted of eight major parts, seven of which were used for the present report. A brief description of each of these seven parts follows:

1. Background or Personal Information--this section includes census-like questions dealing with personal and family background--economic, political, religious, satisfaction with college choice, and level of education.
2. The Activity Scales--measure interest and involvement in important areas of life--community affairs, national and state politics, international and intercultural affairs, art, music, drama, literature, religion, and science. These scales are based on the assumption that the extent to which people engage in certain kinds of activities is a reflection of their interests, values, satisfactions, and commitments. The question that these scales attempt to answer is: "To what extent have college graduates developed an interest and involvement in certain areas of content and experience relevant to some of the objectives of higher education?" The items in each of the scales include some that are commonplace, easy-to-do activities and others that require more effort and thus imply a deeper or more intense level of interest and involvement. Because the items form this kind of pattern, the number of items checked in a scale provides a meaningful and reliable index of activity level. A person's score, then, is simply the number of activities he has checked.
3. The Changing Society--items from this part are intended to measure one's knowledge, awareness, and attitudes toward major trends that are thought to be occurring in American society. The items comprising these scales address themselves to trends in the areas of education, the labor market, economy, government planning, general societal values, sociology and environment, and resources. The two major scales of this section are the Changing Society Occurring scale, which measures one's sensitivity to what some experts think are major trends in our society, and the Changing Society Desirable scale, which measures attitudes toward such actual or assumed changes. Items were drawn and adapted from a variety of writings by social analysts. The response "generally true" is regarded as the correct response to every item

for the Changing Society Occurring scale. Thus, an individual's score is the number of statements marked "generally true." The score for the Changing Society Desirable scale is the number of statements marked "generally desirable," with the exception of one item that is scored "generally undesirable" and another which is not scored.

4. Viewpoints--three scores are derived from various items in this section--the role of government, equal opportunities for women, and civil rights. The higher the scores the more the individual favors interdependence and friendship among all nations, fuller opportunities for women, and civil rights causes, respectively.

5. Educational Benefits--items comprising this section include many of the goals and values commonly sought in higher education. For the purpose of obtaining scores, the items were grouped into three categories--vocational benefits, personal and social benefits, and liberal arts benefits. A person's score on each of these groupings is simply the number of items he marked with the response "very much," indicating that he felt that he benefited very much from attending college on the item under investigation. In looking at the scores for these parts, one can see what objectives are judged to be most fully realized and whether the major benefits claimed are also the major benefits that are intended by the college.

6. Memories of College Experiences--this section of the questionnaire is actually a part of the School and College Experience division of the questionnaire. The intent of items in this section is to see what aspects of college experience stand out in one's memory. The two scores that are developed pertain to the extent to which peer relations and academic experiences "stand out" in the respondents' memories about their college experiences. The score is simply the number of items that were checked in each section.

7. Personal Traits--in this section of the questionnaire certain combinations of responses are totalled to provide an estimate of three personal traits that are, in combination, related to what one may broadly describe as intellectual disposition. For the first trait, called Autonomy, a high score indicates a general independence of traditional authority. The second trait, Complexity, describes an individual's tolerance for ambiguous situations and enjoyment in dealing with complex and novel ideas. Individuals possessing the third trait, Theoretical Orientation, usually have a preference for using the scientific method in thinking. They tend to be logical, analytical, and critical in their approach to problems. For all three traits the scores are simply the number of times a respondent answered in the keyed direction.

Procedure

In the Spring of 1970 the Office of Institutional Research, USMA, in conjunction with the Association of Graduates, USMA, mailed the questionnaires to all USMA graduates from the Class of 1950 whose addresses were available. Data from the other 74 colleges and universities were obtained from the Research and Development Center at UCLA, which had mailed its questionnaires to a random sample of alumni (Class of 1950) in the Spring of 1969. The

selection of participating institutions, however, was not random and is not claimed to be representative of higher education in the United States. Rather, the institutions were selected as examples of various types or categories, so that the major kinds of institutional environments would be reflected. In all, eight categories of institutions were included:

1. Highly selective liberal arts colleges, private, non-sectarian.
2. Strongly denominational liberal arts colleges, Protestant and Catholic.
3. General liberal arts colleges, non-sectarian and moderately denominational.
4. Highly selective universities, public and private.
5. General comprehensive universities, public and private.
6. State colleges and other universities having less extensive graduate programs than comprehensive universities.
7. Colleges having a major emphasis on teacher education.
8. Colleges and universities having a major emphasis on engineering and sciences.

For purposes of the present report comparisons were made between the responses of the USMA graduates and those from institutions listed under category number 8 (engineering and science schools) and the national norm, which consists of the responses of every male respondent from every school except USMA. For the engineering and science schools the following eight institutions were included: California Institute of Technology, Lehigh University, Massachusetts Institute of Technology, Polytechnic Institute of Brooklyn, Purdue University, Pensselaer Polytechnic Institute, Rose Polytechnic Institute, and South Dakota Mines and Technology.

Procedural Caution

As stated in the Introduction, the purpose of the present study was to survey USMA alumni on a series of topics and then to compare the results with the results obtained from graduates of other colleges and universities. Many of the questions asked pertained to some of the long term goals of a college education, such as the following: alumni who are active and informed citizens, participants and contributors to the cultural life of the community, widely read, abreast of changes, and exposed to new ideas and experiences. However, under the limitations of the design of the present study, it is impossible to ascertain if the scores obtained on the various questions were caused by the respondents' college education, a self-selection factor, pre- or post-college experiences, or by an interaction of these factors. But, given these limitations, it is still possible to take the "black box" approach and to report the results at their face value, without considering what the actual

causes of these results were. Essentially, this is the approach that will be taken in presenting the results of the present study. It must be kept in mind that any interpretations of the results of this study that a reader makes must be made in the light of a school's own philosophy, values, beliefs, and goals. This is so because different colleges often possess different goals; for example, for some colleges the extent to which alumni are active in church related areas is a relevant and important goal; but in some other colleges, church activity may be irrelevant and unimportant. Readers of this report are therefore cautioned not to extract results from this study without considering the goals of the colleges involved.

RESULTS

The results of this study can be presented most efficiently by examining the responses to the items in each of the seven major questionnaire parts in turn. This procedure will be followed throughout this section. All the tables used to report the results can be found in Appendix B. Each table has breakouts on five groups: USMA AD, USMA NAD, USMA Total, Engineering and Science, and National Norm. The numbers inside of the lines are all percentages. When the sample size (N), mean ($\bar{X}$), and standard deviation (SD) are given the columns are so labeled. In analyzing the results from each table, only the highlights will be pointed out; and only those questions that have norm data from the UCLA sample will be reported on.

1. Background Information--the purpose of this section is to compare USMA graduates with graduates from other colleges and universities on a number of variables pertaining to background data. Each of the items comprising this section will be considered in turn.

a. Highest level of education attained--Table 1 indicates that a much larger percentage of USMA graduates than graduates from other schools have attained a master's degree. However, a smaller percentage of USMA graduates (3 and 4%) than graduates from other colleges (7%) have received a doctorate.

b. Present feeling about undergraduate college--as can be seen from Table 2, very few graduates feel either thoroughly or generally negative about the college they graduated from. A large majority indicated that they are pleasantly nostalgic or have a strong attachment. For USMA Total this percentage was 92. Many more USMA graduates, percentage-wise, than graduates from other colleges, stated that they had a strong attachment to the college from which they received their bachelor's degree.

c. Satisfaction with college choice--data for Table 3 were gathered from the question: "If you could do it over again, would you go to the same undergraduate college?" A greater percentage of USMA graduates would definitely attend their same undergraduate college than would graduates from other colleges. Even about 80% of USMA graduates not on active duty would either definitely or probably attend USMA if they could do it over again. More extensive data on this and related questions can be found in a study by Bridges.*

*Bridges, C.F. The Image of the United States Military Academy Among Cadets and Graduates. Office of Institutional Research, USMA, West Point, NY, in preparation.

d. Size of community of present residence--there is little noteworthy information in Table 4, except to indicate that typically the respondents tend to live in suburbs of metropolitan areas with populations of 500,000 to 2,000,000, or in small towns of 50,000 people or less.

e. Current annual income from all sources--Table 5 shows that almost no USMA graduate has an annual income of less than \$10,000, whereas 8% of the graduates in the national norm sample do. It is interesting to note that 83% of USMA graduates still on active duty reported that their income was between \$15,000 and \$25,000, as compared to 55% for engineering & science graduates, and 45% for the national norm. However, fewer USMA AD graduates listed annual incomes of from \$25,000-\$50,000 than did graduates from other colleges. The group which appears to have the highest income is USMA NAD, with 53% reporting incomes of \$25,000 or more.

f. Political party preference--Table 6 indicates that many more college graduates are Republicans than Democrats. The USMA NAD group is most heavily Republican, with 79% choosing this response. The USMA AD and USMA Total groups are more often non-partisan than are members of the other three groups, but a smaller percentage of USMA graduates listed the Democratic party.

g. Religious identification--only a small percentage of USMA graduates have either no formal religion or no definite religious beliefs (see Table 7). This percentage is slightly higher for graduates of civilian colleges. By far, the Protestant faiths are favored by most college graduates.

2. Activity Scales--results from each of the 11 different Activity Scales will be presented separately. Each of the scales contained from 9 to 14 items, and a respondent's score was simply the number of items checked for each scale. The higher the score the more interested and involved the respondent was considered to be in the area under study. The respondents were instructed to check those items that described an activity which they had engaged in during the past year. Each scale covered a rather large number and variety of activities in different areas of interest and society--activities such as discussing, reading, observing, contributing, and participating. Results of each scale follow:

a. Community affairs--the 12 items in this scale ranged from the fairly common, "I talked about local community problems with my friends," to the less common, "I held office in some local civic group or community organization." As Table 8 shows, USMA graduates still on active duty had a mean score of 4.7 (maximum score = 12.0) compared to means of 6.4 for engineering and science graduates and 6.8 for the national norm. This difference can be seen by noting that a larger percentage of the USMA AD group obtained scores of only 1, 2, 3, and 4. However, the mean score of 6.8 for the USMA NAD group was equivalent to the national norm mean. In drawing inferences from these findings, and all those that follow, it must be remembered that the Army community probably is somewhat different from the civilian community.

b. National and state politics--the 14 items in this scale ranged from the discussion of national or state political issues with friends to the

holding of a political or public office. Once again, the USMA AD group obtained the lowest mean number of items checked (5.7--see Table 9). This appears consistent with Army rules and regulations which tend to be apolitical in nature and often forbid a soldier from taking an active part in a political venture. However, the highest mean score was the score for the USMA NAD group (7.8), indicating that this group was more actively involved in national and state politics than any other group that was studied.

c. Art--once again, the maximum score could be obtained by checking all of the nine items in this section. The items ranged from talking about art to the actual doing of creative painting or other art work. The highest mean score was that of the USMA NAD group (2.6), and the means of the other groups were quite similar (see Table 10). No group had any individual scoring a maximum of 9.0, and no USMA group had anyone scoring 7.0, 8.0, or 9.0.

d. Literature--the 9 items under literature ranged from the talking about new books and the reading of book reviews to the writing of any type of literature for publication. Table 11 indicates that the means of the 3 USMA groups are very similar to each other and about 0.5 and 0.9 higher than the means of the engineering & science and national norm scores, respectively.

e. Education--the 10 items in this section ranged from the talking with friends about schools in the neighborhood to the reading of one or more books about education. Table 12 summarizes the findings from this section. The mean of the USMA Total group (5.2) is about equal to the mean of the engineering and science group (5.3), but lower than the national norm and USMA NAD group means of 5.8 and 5.7, respectively. The lowest mean was obtained by the USMA AD group. However, the range of mean scores for all 11 groups is only 0.8.

f. Music--the 11 items ranged from the buying of phonograph records and listening to music on the radio to the playing of a musical instrument and the participation in some vocal or instrumental group. Table 13 reports that the means of the five groups are quite similar with a spread of only 0.7 between them.

g. Drama--the 11 items went from the talking with friends about movies, plays, TV dramas, etc., to the participation in some drama activity. The three USMA groups scored slightly higher than the other two groups, but the range of the means was only 0.6 (see Table 14).

h. Religion--the nine items went from the rather common attending of church services one or more times to the less common practice of observing religious rituals in one's home. The means of the five groups ranged from 5.5 for the national norm group to 4.9 for the USMA AD and USMA Total groups (see Table 15). It should be pointed out that relative to other activity scales, a much larger percentage of respondents obtained the maximum possible score on this Religion scale.

i. Intercultural--the ten items here ranged from the talking with friends about cultural events in other countries to attending a meeting at which a

large majority of the participants were of a different racial background. Table 16 reports that the means of all three USMA groups are larger than those of the other two groups. The USMA AD group had the highest mean, 4.2.

j. Science--the ten items that could be checked went from talking about science with friends to the making of some type of scientific apparatus. Table 17 shows the highest mean to be that of the engineering and science group (5.1), and the lowest to be USMA AD group (3.6). The means of the other three groups are quite similar to each other.

k. International--the nine items ranged from the discussion of international relations to the participation in a public demonstration for or against some international issue. The means of the three USMA groups are a little higher than those of the other two groups, as reported in Table 18.

3. The Changing Society--this section of the questionnaire has two parts. The first, called Occurring, measures knowledge and awareness about certain major changes that are taking place in American society; and the second, named Desirable, measures attitudes toward such changes. Results follow:

a. Occurring--the distribution of percentages in Table 19 indicates that most respondents received scores between 18 and 20 (the total number of items was 28, and thus the maximum score was 28). There is not much variation in the mean scores, which ranged from 18.1 for engineering and science school graduates, to 19.00 for USMA NAD graduates.

b. Desirable--on only 14 of the 28 items in the Changing society were the respondents asked to indicate if the changes in American society were desirable. Thus, the maximum score was 14. The results, as depicted in Table 20, show that there is very little variation in the mean scores. The means, which range from 7.1 to 7.3, indicate that the respondents felt that only about half of the changes were desirable.

4. Viewpoints--the results of the three parts of this section will be presented one at a time. Each part deals with issues of contemporary concern, and the attitudes of adults about such matters probably have an influence on our society.

a. Government--for this section the higher the score the more the respondent favors interdependence and friendship among all nations, and not an "America Always First" policy. The mean scores of the five groups border at or around 2.0 out of a possible maximum score of 4.0 (see Table 21). The small variation in mean scores indicates that the groups are quite similar in their viewpoints for this part.

b. Women--the five groups obtained identical mean scores of 2.2 on this part of the questionnaire, indicating that they essentially feel the same about equal opportunities for women (see Table 22).

c. Civil Rights--the small variation in mean scores, 2.3 to 2.8, implies that the five groups of respondents felt generally quite similar in their

viewpoints toward civil rights (see Table 23).

5. Educational Benefits--this section measures the extent to which a respondent feels he benefited from going to college in three different areas: vocational, personal and social, and liberal arts. The higher the score the more the respondent felt that he benefited very much from going to college.

a. Vocational--the items in this category include vocational training, specialization, facts in various fields of knowledge, and improved social and economic status. The mean scores of the three USMA groups are slightly higher than those of the other two groups, indicating that the former three groups felt that they benefited, vocationally, slightly more than the latter two groups (see Table 24).

b. Personal and social--under this category were included items dealing with social development, personal development, individuality and independence, friendships and tolerance. Table 25 indicates that the mean scores of the three USMA groups are about twice the mean of the national norm group and over three times the mean of the engineering and science group.

c. Liberal education--this category included items about various fields of knowledge and intellectual skills--literature, philosophy, culture, critical thinking, aesthetic sensitivity, communication, science, technology, and citizenship. Once again, all three USMA groups felt that they benefited more in these areas than did their counterparts in civilian institutions (see Table 26).

6. Memory of College Experiences--two scores are derived from items in this section. The first pertains to the extent to which peer or interpersonal relationships stand out in the respondents' memories, and the second concerns the extent to which academic experiences are prominent.

a. Peer--all items in this part had reference to some group activities and peer relationships. The means of all three USMA groups are larger than those of the other two groups, indicating that USMA graduates are more aware of peer relationships while in college (see Table 27).

b. Academic--items here pertain to professors, courses, and scholarships. Table 28 shows that academic experiences were more memorable to civilian school graduates than they were to USMA graduates. The means for the former are slightly larger than the means for the latter.

7. Personal Traits--the three personal traits measured in this section are autonomy, complexity, and theoretical orientation.

a. Autonomy--a high score on this scale indicates a general independence of traditional authority. Table 29 presents data indicating that the engineering & science and the national norm groups have higher mean scores than the USMA groups. Apparently, the USMA groups are a little less autonomous and more concerned with traditional authority.

b. Complexity--a high score indicates tolerance for ambiguous situations and enjoyment in dealing with complex and novel ideas. The mean scores of the five groups have a range of 11.9 to 12.6, indicating roughly equivalent amounts of this trait (see Table 30).

c. Theoretical Orientation--respondents scoring high on this trait usually prefer using the scientific method, and thus are logical, analytical, and critical in their approach to problems. Table 31 shows that the mean score for USMA NAD is the highest and that the USMA AD and national norm groups are the lowest on this trait.

SUMMARY

The purpose of the present study was to compare the responses of USMA and civilian college graduates on a number of topics of current interest. Members of the USMA Class of 1950 were surveyed by means of a questionnaire developed at the Center for the Study of Evaluation at the University of California, Los Angeles (UCIA). Comparison data on 5651 graduates of the Classes of 1950 from 74 civilian colleges and universities were made available by this same Center. In order to make comparisons more meaningful, the respondents to the mailed questionnaires were divided into five groups: USMA graduates who were still on active duty; USMA graduates not on active duty; the total number of USMA graduates who responded to the questionnaire, including the first two groups and also those respondents who could not be classified as either on active duty or not on active duty; graduates from eight engineering and science schools; and graduates from the 74 schools combined, except USMA.

The questionnaire used to obtain the data consisted of items classified under seven major sections, most of which dealt with many of the goals of education which are obtainable and observable only in adult life. A summary of the results from each of these seven sections follows:

1. Background Information--the typical USMA 1950 graduate, as compared to the typical 1950 graduate of other colleges and universities, is more likely to have obtained a master's degree, to have a stronger attraction to his alma mater, to have about as high an income while on active duty, to have a higher income after leaving active duty, and to be more willing to come to USMA again if he could do it all over again. The USMA graduate, as well as the civilian college graduate, is likely to be Republican and of the Protestant faith.

2. Activities--the typical USMA graduate still on active duty is more likely to be less involved in community affairs, national and state politics, education, and science than are the graduates from civilian colleges and USMA graduates not on active duty. However, once the typical USMA graduate leaves active duty, he is more likely to be involved in national and state politics than are members of the other groups, and just as involved in community affairs as the national norm group. The USMA graduate, regardless of active or

not active duty status, tends to be slightly more interested and involved in drama, literature, intercultural activities, and international activities.

3. Changing Society--on the Occurring subscale, the five groups obtained roughly the same scores, indicating that their knowledge and awareness of certain major changes that are taking place in American society is quite similar. As to the desirability of such changes, results of the Desirable subscale showed the groups to be very similar in their attitudes.

4. Viewpoints--no major differences were evident on the three subscales of Government, Women, and Civil Rights, indicating that the respondents possessed similar viewpoints on these three variables. As far as could be ascertained, the responses of the groups appeared to be of the middle of the road variety on these three issues.

5. Educational Benefits--the three subscales of this section were Vocational, Personal and Social, and Liberal Education. For each subscale, the respondent's score indicated the extent to which he felt that he had benefited from going to college. In the Vocational subscale all three USMA groups felt that going to college was slightly more beneficial to them than did graduates from civilian colleges. On the other two subscales, Personal and Social and Liberal Education, the three USMA groups scored much higher than their counterparts from civilian colleges, indicating that the USMA graduates felt that they had benefited much more in these two areas by going to college.

6. Memory of College Experiences--on the Peer subscale the three USMA groups had higher scores than the two civilian groups, implying that the former are presently more aware of college peer and group activities. For the Academic subscale, which pertained to the extent to which professors, courses, and scholarships stand out in their memories, the graduates from civilian colleges scored higher, meaning that they were more aware of these variables.

7. Personal Traits--consisted of three subscales, Autonomy, Complexity, and Theoretical Orientation. Scores on the Autonomous subscale showed that the USMA groups are slightly less autonomous and more concerned with traditional authority than are the graduates from civilian colleges. On the Complexity subscale, the scores were roughly equivalent, and on the Theoretical Orientation subscale, the mean score of the USMA graduates not on active duty was the highest and that of the active duty USMA graduates and the national norm group's scores were the lowest.

In summation, the five groups have very similar response patterns to some items, yet markedly distinct response patterns to other items. Generally speaking, it appears that the USMA graduate compares favorably, if not more favorably, with graduates from civilian colleges and universities on most of the areas sampled in this study. It is particularly noteworthy to mention the finding that the USMA graduate feels that he has benefited more by going to college than does the graduate from a civilian college or university. However, it must be cautioned that any interpretation of the results of this study must be made in conjunction with the goals, philosophies, values, and beliefs of the schools involved, since they may vary from institution to institution.

APPENDIX A

ALUMNI SURVEY

ALUMNI SURVEY



An Inquiry on the Activities, Opinions, and Experience of College Graduates

Nº 36210

13

ABOUT THE QUESTIONNAIRE.....

This inquiry is one of several nationwide studies being conducted by the Research and Development Center at UCLA -- in cooperation with about 100 other colleges and universities.

Its purpose is to understand more fully the activities, interests, and judgments of college graduates.

We believe that such understanding will be of benefit to those who carry out and attempt to improve the educational programs in our colleges and universities, both public and private.

ABOUT YOUR REPLY.....

Your individual reply is confidential.

The return envelope and questionnaire are numbered for clerical purposes only.

Most of the questions can be answered simply by filling in the oval next to the appropriate spaces. Please use a soft lead pencil No. 2 preferred.

We hope you will answer all the questions, but if there are some which you prefer not to answer, omit them.

The questionnaire is being sent to a carefully selected cross-section of college alumni. Your reply is important.

We hope you will find that answering the questions is personally interesting, informative, and well worth the forty five minutes or so of your time to do so.

We appreciate your cooperation.

ACTIVITIES

The check-lists in this section of the questionnaire cover a rather large number and variety of activities in different areas of interest and society - activities such as discussing, reading, observing, contributing, and participating. Opportunity, time, interest, and inclination all have a bearing on what one does, can do, or would want to do. No one does everything; every one does something. As you read the statements in these lists, please fill in the oval next to each one that describes an activity you have engaged in during the past year.

COMMUNITY AFFAIRS

During the past year:

- ☐ I talked about local community problems with my friends.
- ☐ I followed local events regularly in my newspaper.
- ☐ I gave money to the community fund or chest or other local charity.
- ☐ I belonged to a community organization interested in civic affairs—such as PTA, Chamber of Commerce, League of Women Voters, business or professional association, etc.
- ☐ I attended meetings of some local civic group.
- ☐ I contributed time or money to some civic project—such as a playground, park, school, hospital, museum, theater, etc.
- ☐ I had contact with a local official about some community problem.
- ☐ I collected money, called on my neighbors, carried a petition, or engaged in some similar activity in behalf of a local community project.
- ☐ I voted in the last local election.
- ☐ I attended a public hearing about a local issue—such as zoning, schools, taxes, traffic, etc.
- ☐ I participated in a demonstration or protest about a local issue.
- ☐ I held office in some local civic group or community organization.

NATIONAL and STATE POLITICS

During the past year:

- ☐ I discussed political issues with my friends.
- ☐ I listened to speeches, news specials, discussion programs, etc. about political issues on TV or radio weekly or monthly.
- ☐ I followed state and national political events regularly in my newspaper.
- ☐ I read magazine articles about state and national problems weekly or monthly.
- ☐ I read one or more books about politics.
- ☐ I voted in the last national election.
- ☐ I voted in the last state election.
- ☐ I attended meetings of a political club or group.
- ☐ I did some volunteer or paid work for a political party.
- ☐ I contributed money to some political cause or group.
- ☐ I talked with an elected official about some problem (national or state).
- ☐ I signed a petition, wrote a letter, card, or telegram concerned with some political issue.
- ☐ I participated in a public protest or rally over some political issue.
- ☐ I held a political or public office (elected or appointed, full time or part time).

ART

During the past year:

- ☐ I talked about art with my friends.
- ☐ I read critiques or reviews of art shows or exhibits in the newspapers or magazines.
- ☐ I visited an art gallery or art museum.
- ☐ I attended an exhibition of contemporary painting or sculpture.
- ☐ I read one or more books about art, artists, or art history.
- ☐ I bought a painting or piece of sculpture.
- ☐ I attended an art study group or workshop.
- ☐ I contributed money or time in support of some activity related to art.
- ☐ I did some creative painting or other art work myself.

LITERATURE

During the past year:

- ☐ I talked about new books with my friends.
- ☐ I read book reviews in the newspapers or magazines at least once a month.
- ☐ I read for personal interest (not business) at least one book a month.
- ☐ I bought books for my personal library.
- ☐ I read one or more contemporary novels.
- ☐ I read poetry.
- ☐ I attended a lecture given by a novelist, critic, poet, or playwright.
- ☐ I belonged to a group which discussed books.
- ☐ I wrote an essay, story, play, poem, etc., for publication.

EDUCATION

During the past year:

- ☐ I talked with my friends about the school's in the neighborhood.
- ☐ I visited a local school.
- ☐ I talked with a school teacher or other school official.
- ☐ I read about education in the newspaper.
- ☐ I voted (or would vote) in favor of a bond issue or other proposition to provide more money for the public schools.
- ☐ I enrolled in a course offered by a college or university.
- ☐ I attended one or more concerts or lectures at a college or university campus.
- ☐ I attended one or more athletic events at a college or university.
- ☐ I gave money to a college or university.
- ☐ I read one or more books about education.

MUSIC

During the past year:

- ☐ I bought phonograph records.
- ☐ I listened attentively to radio music at home or in my car.
- ☐ I read reviews of musical performances or new record releases in the newspapers or magazines.
- ☐ I talked about music with my friends.
- ☐ I attended one or more symphony, opera, or chamber music concerts.
- ☐ I attended one or more concerts of contemporary folk music, rock, jazz, etc.
- ☐ I read one or more books about music, musicians, or music history.
- ☐ I listened to some serious music by contemporary composers.
- ☐ I contributed time or money in support of some local musical enterprise.
- ☐ I played a musical instrument.
- ☐ I participated in some vocal or instrumental group-choir, orchestra, or other group.

DRAMA

During the past year:

- ☐ I talked about movies, plays, TV dramas, etc. with my friends.
- ☐ I watched TV dramas at least once a month.
- ☐ I went to the movies at least once a month.
- ☐ I read theater or movie reviews in the newspapers or magazines at least once a month.
- ☐ I read one or more books about the theater, or a book of plays.
- ☐ I attended one or more plays—either professional or amateur.
- ☐ I belonged to a group which discussed contemporary drama.
- ☐ I attended one or more plays by a contemporary dramatist.
- ☐ I saw several movies that could be described as experimental, avant garde, etc.
- ☐ I contributed time or money in support of some local theatrical enterprise.
- ☐ I participated in some drama activity—acted, danced, sang, worked on sets or costumes, made movies, etc.

RELIGION

During the past year:

- ☐ I attended church services one or more times.
- ☐ I belonged to a church.
- ☐ I contributed a regular sum of money to the church.
- ☐ I read articles about church or religious activities in the newspapers or magazines.
- ☐ I read one or more books about religion.
- ☐ I attended one or more church functions held during the week.
- ☐ I did some volunteer work for my church.
- ☐ I discussed ideas, practices, or problems of religion with my friends.
- ☐ I observed religious rituals in my home (said grace before meals, lit candles on the Sabbath, etc.).

INTERCULTURAL

During the past year:

- ☐ I talked with my friends about people and cultural events in other countries.
- ☐ I saw one or more foreign movies.
- ☐ I went to a concert, theater, or exhibition which featured the art, music or drama of another country.
- ☐ I corresponded with a citizen of another country.
- ☐ I traveled in another country.
- ☐ I entertained a visitor from another country.
- ☐ I read one or more books by authors from another country.
- ☐ I attended one or more meetings or lectures about other countries or about other racial or ethnic groups.
- ☐ I participated in efforts to improve understanding between countries, races, or ethnic groups.
- ☐ I attended a meeting at which a large majority of the participants were of a racial background different from mine. (If so, what was the racial background of most of the participants? Underline one: Black, Brown, Yellow, White, Other.)

SCIENCE

During the past year:

- ☐ I talked about science with my friends.
- ☐ I watched special presentations about science on TV.
- ☐ I read articles about new developments in scientific research in the newspapers or magazines.
- ☐ I attended a scientific exhibit or museum.
- ☐ I read a new book about science.
- ☐ I subscribed to a magazine about science.
- ☐ I attended a lecture or demonstration on some aspect of science.
- ☐ I attended meetings of a science study club or work group.
- ☐ I carried out a scientific experiment, recorded scientific observations of things in the natural setting, or assembled and maintained a collection of scientific specimens.
- ☐ I made some piece of scientific apparatus—such as a hi-fi component, photo-enlarger, telescope, etc.

INTERNATIONAL

During the past year:

- ☐ I discussed international relations, foreign policy, the U. N. etc., with my friends.
- ☐ I read newspapers or magazine articles dealing with international relations.
- ☐ I read one or more books about other countries or international relations.
- ☐ I read U. N. publications or listened to U. N. sponsored programs on radio or TV.
- ☐ I contributed time or money for some international group or project.
- ☐ I spoke to a civic group or club on international relations or foreign policy.
- ☐ I attended one or more meetings or lectures about international affairs or foreign policy.
- ☐ I wrote to a news publication or government official in behalf of some legislation or U. S. policy regarding international relations.
- ☐ I participated in a public demonstration for or against some international issue.

THE CHANGING SOCIETY

There are periods of history when change seems to be more turbulent than others. Often the directions of change seem unclear; and people differ in their judgment about whether particular trends or tendencies are desirable or undesirable. We have listed below a number of statements that describe changes or tendencies which may or may not be occurring in the United States. For each statement indicate first, in the left hand columns, whether you think the change or trend it describes is or is not occurring -- by filling the appropriate oval Generally True, Don't Know, or Generally Not True. Then after some of these statements, and in the right hand columns, you will find space for an additional response. For this response, indicate whether you think the change described would be desirable or undesirable if it in fact occurred or is occurring.

Occurring			Desirable	
Generally True ☐	Don't Know ☐		Generally Desirable ☐	No Opinion ☐
☐	☐		☐	☐
☐	☐		☐	☐
☐	☐	An increasing proportion of young people are graduating from high school and going to college.	☐	☐
☐	☐	The number of people going to school (old and young, full-time and part-time) is, or soon will be, greater than the number of people working at their job.		
☐	☐	The prolongation of education is increasing the economic dependence of adolescents and young adults on their parents.	☐	☐
☐	☐	There is an increasing gap and conflict between generations.		
☐	☐	The problem of disadvantaged individuals who find themselves in chronic poverty is becoming more serious.		
☐	☐	Environmental pollution (especially of the air and water) is becoming a critical problem.		
☐	☐	The rate of consumption of natural resources is threatening to exhaust their supply.		
☐	☐	Society is becoming so complex and interdependent that it is no longer adequate to try to solve one problem at a time.		
☐	☐	Long range planning is becoming essential for the health and welfare of large urban areas.		
☐	☐	A new style of politics, involving broader and more active participation at all levels, is emerging.	☐	☐
☐	☐	More people are coming to realize and accept the value of self-expression--for example, through the arts.	☐	☐
☐	☐	As our society develops, the capacity for inter-dependence (relating with others) may be valued more highly than the capacity for independence and self-reliance.	☐	☐
☐	☐	Less importance is being attached to the value of individual success and achievement than has been traditional in our society.	☐	☐
☐	☐	White collar workers are outnumbering blue collar workers.		

Occurring			Desirable		
Generally True	Don't Know	Generally Not True	Generally Desirable	No Opinion	Generally Undesirable
☐	☐	☐	☐	☐	☐
Except for scientists, professionals, and executives, the number of leisure hours (among waking hours) is becoming greater than the number of working hours for the bulk of the employed population.					
☐	☐	☐			
Career changes are becoming common—one's initial occupation is less likely to last out a working life than was true in the past.					
☐	☐	☐			
A great many industrial jobs depending on unskilled and semi-skilled labor are being eliminated by automation and computers.					
☐	☐	☐	☐	☐	☐
Scientists and professionals are having an increasingly important influence on economic and governmental policies.					
☐	☐	☐			
Technologies for producing and distributing information (computers, mass media, etc.) are becoming as significant to the economy as technologies for producing and distributing energy (fuels, electricity, atomic energy etc.)					
☐	☐	☐	☐	☐	☐
There is an increasing movement toward inter-city government embracing both urban and suburban areas, and adjacent cities.					
☐	☐	☐	☐	☐	☐
Some business and industrial organizations are moving away from competitive relations toward more collaborative relations.					
☐	☐	☐	☐	☐	☐
There is an emerging trend for major industries to regard their resources as belonging not just to them but to all of society.					
☐	☐	☐	☐	☐	☐
There is a growing trend to coordinate major public and private services—for example, in housing, transportation etc.					
☐	☐	☐	☐	☐	☐
There is a tendency for large neighborhoods to become more exclusive in the kinds of people who live in them—white middle class suburbs as well as parts of the "inner city".					
☐	☐	☐	☐	☐	☐
The market sector of the economy (manufacturing and private industry) is becoming less important than the non-market sector (services, non-profit organizations, households, etc.) in producing the wealth of our society.					
☐	☐	☐	☐	☐	☐
Within the market sector of the economy, the activities of the larger enterprises are becoming increasingly international in scope.					
☐	☐	☐	☐	☐	☐
Increasingly, government is controlling the markets for the most advanced industries.					
☐	☐	☐	☐	☐	☐
The cost of producing a major commodity such as new housing creates equally large costs for such consequent needs as expanded sewage systems, access roads, traffic controls, recreational facilities, schools, public utilities, etc.					

VIEWPOINTS

The statements below express viewpoints that some people agree with and others don't. Indicate your own attitude by filling in one of the ovals to the left of each statement (A = Agree; ? = No Opinion; D = Disagree.)

- A ? D
- ☐ ☐ ☐ Government planning should be strictly limited, for it almost inevitably results in the loss of essential liberty and freedom.
- ☐ ☐ ☐ We are not likely to have lasting peace unless the U. S. and its allies are stronger than all the other countries.
- ☐ ☐ ☐ The United Nations should have the right to make decisions that would bind members to a course of action.
- ☐ ☐ ☐ Literature should not question the basic moral concepts of society.
- ☐ ☐ ☐ The United States has enough natural resources and scientific know-how to be economically self-sufficient.
- ☐ ☐ ☐ Parents know as much about how to teach children as public school teachers know.
- ☐ ☐ ☐ More women should be involved in policy formation both in business and government.
- ☐ ☐ ☐ Professional women should have the same benefits and opportunities as their male colleagues.
- ☐ ☐ ☐ Being a housewife provides many opportunities to apply broad and creative interests.
- ☐ ☐ ☐ Family patterns and attitudes should allow, and often encourage, married women to follow their own interests, even if they have young children.
- ☐ ☐ ☐ If Negroes live poorly, it is in great part the fault of discrimination and neglect from whites.
- ☐ ☐ ☐ Anyone, no matter what his color, who is willing to work hard can get ahead in life.
- ☐ ☐ ☐ More money and effort should be spent on education, welfare, and self-help programs for the culturally disadvantaged.
- ☐ ☐ ☐ Issues such as law and order, civil rights, and public demonstrations are complex and need careful evaluation and judgment of individual cases.
- ☐ ☐ ☐ People who advocate unpopular or extreme ideas should be allowed to speak on college campuses if the students want to hear them.

SOME EDUCATIONAL BENEFITS

In thinking back to your undergraduate experience in college or university to what extent do you feel that you were influenced or benefited in each of the following respects? Please fill in one of the ovals for each of the items listed below.

- | Very much
Quite a bit
Some
Very little | |
|---|---|
| ☐ ☐ ☐ ☐ | Vocational training—skills and techniques directly applicable to a job. |
| ☐ ☐ ☐ ☐ | Background and specialization for further education in some professional, scientific or scholarly field. |
| ☐ ☐ ☐ ☐ | Broadened literary acquaintance and appreciation. |
| ☐ ☐ ☐ ☐ | Awareness of different philosophies, cultures, and ways of life. |
| ☐ ☐ ☐ ☐ | Social development—experience and skill in relating to other people. |
| ☐ ☐ ☐ ☐ | Personal development—understanding one's abilities and limitations, interests, and standards of behavior. |
| ☐ ☐ ☐ ☐ | Critical thinking—logic, inference, nature and limitations of knowledge. |
| ☐ ☐ ☐ ☐ | Aesthetic sensitivity—appreciation and enjoyment of art, music, drama. |
| ☐ ☐ ☐ ☐ | Writing and speaking—clear, correct, effective communication. |
| ☐ ☐ ☐ ☐ | Science and technology—understanding and appreciation. |
| ☐ ☐ ☐ ☐ | Citizenship—understanding and interest in the style and quality of civic and political life |
| ☐ ☐ ☐ ☐ | Appreciation of individuality and independence of thought and action. |
| ☐ ☐ ☐ ☐ | Development of friendships and loyalties of lasting value. |
| ☐ ☐ ☐ ☐ | Vocabulary, terminology, and facts in various fields of knowledge. |
| ☐ ☐ ☐ ☐ | Appreciation of religion – moral and ethical standards. |
| ☐ ☐ ☐ ☐ | Tolerance and understanding of other people and their values. |
| ☐ ☐ ☐ ☐ | Bases for improved social and economic status. |

SCHOOL AND COLLEGE EXPERIENCE

The benefits one gets from education are related, at least in part, to various aspects of personal background and experience – the kind of school, what one studied, and other experiences during the school and college years. This section of the questionnaire asks about some of these factors.

From what kind of a high school did you graduate? (Mark one)

- ☐ Public
- ☐ Catholic
- ☐ Other church-related
- ☐ Private (independent)

About how many students were in your high school graduating class? (Mark one)

- ☐ Fewer than 100
- ☐ Between 100 and 500
- ☐ More than 500

As well as you can recall, about how many students in your high school class went to college? (Mark one)

- ☐ All, or nearly all
- ☐ Most
- ☐ About half
- ☐ Less than half
- ☐ Very few

When did you decide that you wanted to go to college? (Mark one)

- ☐ After I had graduated from high school
- ☐ During my last year in high school
- ☐ During the junior year in high school
- ☐ During the sophomore year in high school
- ☐ Earlier than any of the above
- ☐ Don't remember

Among your circle of friends in high school, about how many went to college? (Mark one)

- ☐ All, or nearly all
- ☐ Most
- ☐ About half
- ☐ Less than half
- ☐ Very few

Approximately what was your average grade in High School? and in College? (Mark one in each column)

High School	College
☐	☐ D, C-
☐	☐ C
☐	☐ C+
☐	☐ B
☐	☐ B+
☐	☐ A, A+

When you were in college, where did you reside most of the time? (Mark one)

- ☐ Dormitory
- ☐ Fraternity or sorority
- ☐ Rooming house
- ☐ Apartment
- ☐ At home, or with relatives
- ☐ Other? _____

Is the college from which you received your Bachelor's degree the same as the college you entered as a freshman? (Mark one)

- ☐ Yes
- ☐ No. If no, what other college(s) did you attend? _____

How much time elapsed between your enrollment in college as a freshman and your graduation with a Bachelor's degree? (Mark one)

- ☐ Four years (or less)
- ☐ More than four years. If more, what accounted for the added time? _____

What is the name of the college from which you received your Bachelor's degree? _____

In College what was your major field of study? (Mark one)	In Gradu- ate School what was your major field of study? (Mark one)	What field is most closely re- lated to your present work? (Mark one)
College	Graduate	Present
☐	☐	☐ Question does not apply to me
☐	☐	☐ Physical sciences or Math
☐	☐	☐ Biological sciences
☐	☐	☐ Social sciences
☐	☐	☐ Language
☐	☐	☐ Humanities
☐	☐	☐ Arts
☐	☐	☐ Engineering
☐	☐	☐ Business
☐	☐	☐ Education
☐	☐	☐ Other, please specify
_____	_____	_____
_____	_____	_____

What is the highest level of education obtained by you? (Mark one)

- ☐ Bachelor's degree
☐ Master's degree
☐ Doctorate degree
☐ Advanced professional degree

If you have a graduate or professional degree, where did you obtain it?

Are you currently enrolled in graduate school or do you have plans to attend? (Mark one)

- ☐ Yes, currently enrolled
☐ Yes, plan to enroll
☐ No

If yes, what is the highest level you expect to obtain? (Mark one)

- ☐ Some graduate work
☐ Master's degree
☐ Doctorate degree
☐ Advanced professional degree

Where? _____

Major field? _____

How sure are you of this? (Mark one)

- ☐ Very sure
☐ Fairly sure
☐ Unsure

When you were in college did you ever discuss any of the following topics with a counselor? or a faculty member? or your parents? (Mark as many as apply under each)

Coun- selor	Faculty	Parents
☐	☐	☐ Your academic work
☐	☐	☐ Your abilities and interests
☐	☐	☐ Your vocational plans
☐	☐	☐ Your college plans - choice of major, whether to go to graduate school, etc.
☐	☐	☐ Personal problems
☐	☐	☐ Financial problems
		☐ Parents were not living

As well as you can recall, about how much did you participate in various activities when you were in high school and college? For each type of activity listed below, please Mark the amount of your participation in it. If the activity was not available (did not exist) in your school or college, please so indicate by Marking in the special columns.

In HIGH SCHOOL					In COLLEGE			
Not Available	Much	Some	None		Much	Some	None	Not Available
☐	☐	☐	☐	Varsity sports	☐	☐	☐	☐
☐	☐	☐	☐	Other sports	☐	☐	☐	☐
☐	☐	☐	☐	Publications	☐	☐	☐	☐
☐	☐	☐	☐	Creative writing	☐	☐	☐	☐
☐	☐	☐	☐	Dramatics	☐	☐	☐	☐
☐	☐	☐	☐	Debate	☐	☐	☐	☐
☐	☐	☐	☐	Arts and crafts	☐	☐	☐	☐
☐	☐	☐	☐	Music: chorus, band, etc.	☐	☐	☐	☐
☐	☐	☐	☐	Student government	☐	☐	☐	☐
☐	☐	☐	☐	Religious groups	☐	☐	☐	☐
☐	☐	☐	☐	Social service groups	☐	☐	☐	☐
☐	☐	☐	☐	Social groups: fraternities, etc.	☐	☐	☐	☐
☐	☐	☐	☐	Political groups	☐	☐	☐	☐
☐	☐	☐	☐	Science clubs or projects	☐	☐	☐	☐
☐	☐	☐	☐	Other academic groups, honoraries, clubs related to your school work	☐	☐	☐	☐
☐	☐	☐	☐	Foreign student exchange	☐	☐	☐	☐

What stands out in your memory about your college experience? (Mark as many as apply)

- | | |
|---|---|
| ☐ Living away from home | ☐ Particular courses that were especially hard and demanding |
| ☐ Living in a dormitory | ☐ Particular courses that opened up new interests for me |
| ☐ Fraternity or sorority activities | ☐ The experience of leadership in some campus activity |
| ☐ Informal discussion with other students | ☐ Some lectures that were particularly stimulating |
| ☐ Participation in sports | ☐ Realizing what the demands of good scholarship really are |
| ☐ Particular professors who took a personal interest in me | ☐ Having lots of dates |
| ☐ Particular professors who encouraged me in my work | ☐ Meeting the person I married |
| ☐ Particular professors who were hard to get along with | ☐ Having to be responsible for my choices and activities |
| ☐ Having to work at a job and still keep up with my studies | ☐ Worrying about whether I would really be able to graduate |
| ☐ The experience of being involved in some extra-curricular activity—such as, music, drama, politics, etc. | ☐ Anything else? What? _____ |

What is your present feeling about your college? (Mark one)

- ☐ I have a strong attachment to it.
- ☐ Pleasantly nostalgic, but no strong feeling.
- ☐ More or less neutral.
- ☐ Generally negative.
- ☐ Thoroughly negative.

When you were in college, how well did you like it? (Mark one)

- ☐ I was enthusiastic about it.
- ☐ I liked it.
- ☐ I was more or less neutral about it.
- ☐ I didn't like it.

If you could do it over again, would you go to the same college from which you received your Bachelors' degree? (Mark one)

- ☐ Yes, definitely
- ☐ Probably yes
- ☐ Probably no
- ☐ No, definitely

Regardless of any vocational benefit college may have had for you, would you now say that going to college was a very important and beneficial experience in your life? (Mark one)

- ☐ Definitely yes
- ☐ Generally yes
- ☐ Generally no
- ☐ Definitely no

PERSONAL INFORMATION

People differ in many ways – in age, sex, marital status, in where they have lived and traveled, in the kinds of work they do, in their politics, religion, race ethnic background, in what they like, and in how they see themselves. Information about such matters is clearly relevant to a research study that is attempting to learn more about the lives of college-educated adults in our society. We hope you will be willing to answer all of these questions. If you have strong feelings about not answering a particular question, then don't answer it! We would remind you that all your responses are confidential, and that we have not asked you to write your name anywhere in the questionnaire. In answering fill in the oval next to the answer you choose.

How old are you? (Mark one)

- ☐ under 21
- ☐ 21-25
- ☐ 26-30
- ☐ 31-35
- ☐ 36-40
- ☐ 41-45
- ☐ 46-50
- ☐ over 50

Are you.....? (Mark one)

- ☐ Male
- ☐ Female

What is your marital status?
(Mark one)

- ☐ Single
- ☐ Married
- ☐ Separated, widowed, or divorced

Do you have any children?
(Mark one)

- ☐ Yes (How many? _____)
- ☐ No

How many children are living
in the same household with you?
(Mark one)

- ☐ None
- ☐ One
- ☐ Two
- ☐ Three or more

What is the highest level of education
obtained by your parents? (Mark one
in each column)

Father Mother

- | | | |
|-----------------------|-----------------------|---------------------|
| ☐ | ☐ | Grammar school |
| ☐ | ☐ | Some high school |
| ☐ | ☐ | High school diploma |
| ☐ | ☐ | Some college |
| ☐ | ☐ | Bachelor's degree |
| ☐ | ☐ | Master's degree |
| ☐ | ☐ | Doctor's degree |

Advanced professional

- | | | |
|-----------------------|-----------------------|-------------|
| ☐ | ☐ | Law |
| ☐ | ☐ | Medicine |
| ☐ | ☐ | Other _____ |

Which of the following best describes
the community you think of as your
residence—Before college? and Today?
(Mark one in each column)

Before

College Today

- | | | |
|-----------------------|-----------------------|-------------------------------|
| ☐ | ☐ | Farm or open country |
| ☐ | ☐ | Small town (Less than 50,000) |
| ☐ | ☐ | City (50,000-500,000) |

Big city:

- | | | |
|-----------------------|-----------------------|---------------------|
| ☐ | ☐ | (500,000-2,000,000) |
| ☐ | ☐ | (over 2,000,000) |

Suburb in a metropolitan
area of:

- | | | |
|-----------------------|-----------------------|---------------------|
| ☐ | ☐ | (under 500,000) |
| ☐ | ☐ | (500,000-2,000,000) |
| ☐ | ☐ | (over 2,000,000) |

About how many books do you have in your home? And about how many books were in your parent's home at the time you were going to college? (Mark one in each column)

You	Parents
☐	☐ Under 50
☐	☐ 50 - 100
☐	☐ 100 - 200
☐	☐ 200 - 500
☐	☐ over 500

Approximately what is your current economic status (annual income from all sources, including your spouse's)? And about what was your parent's income when you were in college? (Mark one in each column)

Yours	Parents
☐	☐ under 5000
☐	☐ 5000 - 10,000
☐	☐ 10,000 - 15,000
☐	☐ 15,000 - 25,000
☐	☐ 25,000 - 50,000
☐	☐ over 50,000

With respect to political choices, how do you usually think of yourself? and your parents? (Mark one in each column)

You	Parents
☐	☐ Republican
☐	☐ Democrat
☐	☐ Non-partisan or no specific affiliation
☐	☐ Other? _____
☐	☐ Prefer not to answer

What do you identify as the predominant ethnic or national background of your ancestors? (for example, English, Irish, Polish, Italian, Swedish, German, etc.)

Did any of your recent ancestors (parents or grandparents) come to the United States from another country? (Mark one)

☐ Yes
☐ No

Which of the following best describes your religious identification? And the identification of your parents? (Mark one in each column)

You	Parents
☐	☐ Catholic
☐	☐ Jewish
☐	☐ Protestant (What denomination?) _____
☐	☐ No formal religion
☐	☐ No definite religious beliefs
☐	☐ Other? _____
☐	☐ Prefer not to answer

What is your racial identification?

In what parts of the country have you lived during various periods of your life? (Mark as many as apply under each)

Before College	During College	After College	
☐	☐	☐	Northeast
☐	☐	☐	Middle Atlantic
☐	☐	☐	South
☐	☐	☐	Midwest
☐	☐	☐	Southwest
☐	☐	☐	Mountain States
☐	☐	☐	Far West
☐	☐	☐	Outside the U. S.

What is the approximate total length of time you have spent in countries outside of the U. S.? (Mark one in each column)

Before College	During College	After College	
☐	☐	☐	None
☐	☐	☐	A few days
☐	☐	☐	A few weeks
☐	☐	☐	Several months
☐	☐	☐	A year or more

In the country where you have spent the most time, outside the U. S., what was the main reason for your being there? (Mark one)

☐ Have not been in other countries
☐ Armed Forces service
☐ Work
☐ Study
☐ Personal travel
☐ I was a resident of the country

Were you ever in the Armed Forces? (Mark one)

☐ Yes
☐ No

Please classify your father's major occupation and your own present full-time occupation by marking the category which seems to fit best. (Note that the last category under the heading "you" is "housewife". Mark this only if you are a housewife full-time. If you work outside the home part-time, do not mark "housewife", but instead mark the nature of your work in the third column headed "Part-time".)

Father	You	Part-time
☐	☐	☐ Professional 1 (typically requiring a doctorate or advanced professional degree—such as doctor, lawyer, professor, etc.)
☐	☐	☐ Professional 2 (typically requiring a master's degree or some professional training beyond college—such as teacher, engineer, accountant)
☐	☐	☐ Managerial or executive
☐	☐	☐ Semi-professional or technical (such as programmer, nurse, lab technician)
☐	☐	☐ Public official or supervisor
☐	☐	☐ Small business proprietor or farm owner
☐	☐	☐ Sales or skilled clerical (such as department store salesman, stock clerk, secretary, etc.)
☐	☐	☐ Semi-skilled or general labor (such as machine operator, farm laborer, construction worker, etc.)
	☐	☐ Housewife

What exactly is your occupation? What do you do—for example, sales manager of an insurance company, chemical research in an oil company, teach physical education in high school? _____

In what kind of organization do you work? (Mark one)

- ☐ Self employed
- ☐ Business or industrial firm
- ☐ Educational agency
- ☐ Government agency
- ☐ Other non-profit agency

Which of the following things do you do fairly regularly in your work?

(Mark as many as apply)

- ☐ Plan your own work
- ☐ Supervise others
- ☐ Make policy decisions
- ☐ Write reports
- ☐ Do original research or writing
- ☐ Keep records
- ☐ Instruct others
- ☐ Counsel or advise others
- ☐ Make speeches or present reports
- ☐ Organize operations
- ☐ Attend meetings
- ☐ Analyze data

Which of the following characteristics do you associate with you work? (Mark as many as apply)

- ☐ Initiative
- ☐ Responsibility
- ☐ Creativity
- ☐ Stability
- ☐ Prestige
- ☐ Recognition
- ☐ Security
- ☐ Opportunity
- ☐ Risk
- ☐ Variety
- ☐ Independence
- ☐ Regularity
- ☐ Stimulation
- ☐ Pressure
- ☐ Reward
- ☐ Pleasant surroundings
- ☐ Interesting associates

Among your circle of friends today (the people you frequently see, talk with, and do things with), about how many are college graduates? (Mark one)

- ☐ All, or nearly all
- ☐ Most
- ☐ About half
- ☐ Less than half
- ☐ Very few

VOCABULARY

This vocabulary "test" is designed to provide information on the word power of college graduates. Some of the words are very difficult. Only a few people can define all of them correctly, so do not be surprised if some or many of them are unfamiliar to you.

The words to be defined are printed in capital letters. Underneath each of these capitalized words, look for a word that comes closest to the same meaning and fill in the oval in front of that word. Do not consult a dictionary!

HYPOTHESIS:

- ☐ logic
- ☐ procedure
- ☐ mistake
- ☐ reality
- ☐ supposition

ANTITHESIS:

- ☐ choice
- ☐ response
- ☐ awareness
- ☐ research
- ☐ opposite

LUDICROUS:

- ☐ clear
- ☐ comical
- ☐ believable
- ☐ profitable
- ☐ stupid

DIFFIDENT:

- ☐ shy
- ☐ unusual
- ☐ quarrelsome
- ☐ sarcastic
- ☐ polite

ILLUSTRIOUS:

- ☐ witty
- ☐ dead
- ☐ photographed
- ☐ famous
- ☐ busy

STIGMA:

- ☐ web
- ☐ taint
- ☐ darkness
- ☐ dream
- ☐ creed

IRASCIBLE:

- ☐ restless
- ☐ reddened
- ☐ methodical
- ☐ cranky
- ☐ righteous

PEDANTIC:

- ☐ heavy
- ☐ mischievous
- ☐ harsh
- ☐ stilted
- ☐ walking

IMMINENT:

- ☐ weak
- ☐ wicked
- ☐ approaching
- ☐ huge
- ☐ subjective

EULOGY:

- ☐ praise
- ☐ poetry
- ☐ funeral
- ☐ harmony
- ☐ substitution

DECOROUS:

- ☐ proper
- ☐ conscientious
- ☐ gaudy
- ☐ pompous
- ☐ unaware

EQUIVOCAL

- ☐ loud
- ☐ deceitful
- ☐ mild
- ☐ just
- ☐ doubtful

FACILE:

- ☐ easy
- ☐ true
- ☐ artificial
- ☐ witty
- ☐ deceptive

AUSTERE:

- ☐ thin
- ☐ severe
- ☐ starry
- ☐ strange
- ☐ colorless

ABSTRUSE:

- ☐ sharp
- ☐ evident
- ☐ obscure
- ☐ blunt
- ☐ irregular

EPHEMERAL:

- ☐ many-colored
- ☐ short-lived
- ☐ future
- ☐ feminine
- ☐ obscure

BLATANT:

- ☐ flaming
- ☐ noisy
- ☐ windy
- ☐ common
- ☐ colorful

AMBIGUOUS:

- ☐ changeable
- ☐ defective
- ☐ versatile
- ☐ doubtful
- ☐ dishonest

SUCCINCT:

- ☐ enveloping
- ☐ tasty
- ☐ terrifying
- ☐ terse
- ☐ helpful

SEDULOUS:

- ☐ untiring
- ☐ tempting
- ☐ evil
- ☐ jealous
- ☐ rebellious

PERSONAL TRAITS

We all have different preferences and personal characteristics. We would like to know more about the relationship of different choices and traits to important college and subsequent career experiences. On the left please mark all the items below that you generally find to your liking. On the right, please mark all the adjectives that you think are generally descriptive of you. (Please Mark all the items that apply)

I generally like:

- ☐ Unquestioning obedience
- ☐ Strict law enforcement
- ☐ The tried and true
- ☐ Determination and ambition
- ☐ Strong family ties
- ☐ Unwavering patriotism
- ☐ Perfect balance in composition
- ☐ Novel experiences
- ☐ Predictable outcomes to problems
- ☐ Original work
- ☐ A set schedule of activities
- ☐ A proper place for everything
- ☐ The one right answer to questions
- ☐ Friends without complex problems
- ☐ Straight-forward reasoning
- ☐ Dealing with new or strange ideas
- ☐ The perfectly completed object
- ☐ Quick unhesitating decisions
- ☐ Original research work
- ☐ To draw my own conclusions
- ☐ Solving long, complex problems
- ☐ Critical consideration of theories
- ☐ Science and mathematics
- ☐ Contemplating the future of society
- ☐ Men interested in ideas
- ☐ Discovering how things work
- ☐ Scientific displays
- ☐ Detecting faulty reasoning

i generally am:

- ☐ Well-organized
- ☐ Practical
- ☐ Individualistic
- ☐ Questioning
- ☐ Predictable
- ☐ Open-minded
- ☐ Introspective
- ☐ Experimental
- ☐ Creative
- ☐ Undistracted
- ☐ Analytical
- ☐ Critical-minded
- ☐ Scientific
- ☐ Sociable
- ☐ Contemplative
- ☐ Dutiful
- ☐ Determined
- ☐ Conventional
- ☐ Unrestrained
- ☐ Adaptable
- ☐ Permissive
- ☐ Worried
- ☐ Happy
- ☐ Calm
- ☐ Self-confident
- ☐ Nervous
- ☐ Anxious
- ☐ Restless

We are most appreciative of your cooperation in completing this questionnaire. To us, a questionnaire is nothing more nor less than an effort to ask honest and relevant questions in the hope that honest and relevant answers will be given. We believe that higher education is a very important fact in our society; and that those who are responsible for it, or are concerned about it, should know as much about it as they can. If our study, thanks to the response which you and thousands of others will give us, helps to provide the basis for better informed judgments, positive or negative, our efforts will have been worthwhile.

If there is anything you would like to add – about yourself, or your college, or society in general, or this questionnaire in particular, please do so. Again, thank you for your interest, your time, and your sincerity. We hope that having this look at your own activities, views, and experiences has been of some interest and benefit to you.

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are some minor smudges and faint marks on the paper, particularly near the top edge and along the right side, suggesting it might be a scan of a physical document. No text or other markings are present on the page.

APPENDIX B

TABLES 1 THROUGH 31

TABLE 1

HIGHEST LEVEL OF EDUCATION ATTAINED*

Type of Institution	Bachelor's Degree	Master's Degree	Advanced Professional Degree	Doctorate Degree	N
USMA AD	32%	64%	2%	3%	133
USMA NAD	49	41	8	3	39
USMA Total	33	60	3	4	326
Engineering & Science	71	20	2	7	1060
National Norm	59	25	9	7	5651

*Because of rounding errors, the percents across rows do not always equal 100 in this and succeeding tables.

TABLE 2

PRESENT FEELING ABOUT UNDERGRADUATE COLLEGE

Type of Institution	Thoroughly Negative	Generally Negative	More or Less Neutral	Pleasantly Nostalgic But No Strong Feeling	Strong Attachment to it	N
USMA AD	0%	1%	4%	23%	73%	135
USMA NAD	0	0	10	18	72	39
USMA Total	0	2	5	23	69	329
Engineering & Science	1	4	19	45	32	1060
National Norm	1	4	18	49	29	5651

TABLE 3
SATISFACTION WITH COLLEGE CHOICE

Type of Institution	Yes, Definitely	Probably Yes	Probably No	No, Definitely	N
USMA AD	59%	27%	11%	3%	133
USMA NAD	42	37	13	8	38
USMA Total	56	26	13	6	326
Engineering & Science	37	41	16	6	1060
National Norm	30	43	21	6	5351

TABLE 4
SIZE OF COMMUNITY OF PRESENT RESIDENCE

Type of Institution	Farm or Open Country	Small Town (less than 50,000)	City (50,000-500,000)	Big City (500,000-2,000,000)	Big City (Over 2,000,000)	Suburb in Metro. Area (Under 500,000)	Suburb in Metro. Area (500,000-2,000,000)	Suburb in Metro. Area (Over 2,000,000)	N
USMA AD	2%	27%	20%	8%	3%	5%	30%	5%	131
USMA NAD	11	22	16	11	0	3	19	19	37
USMA Total	3	24	21	8	2	6	24	12	319
Engineering & Science	5	27	21	5	4	8	15	17	1060
National Norm	5	30	24	6	4	7	11	12	5651

TABLE 5

CURRENT ANNUAL INCOME FROM ALL SOURCES

Type of Institution	Under \$5,000	\$5,000-10,000	\$10,000-15,000	\$15,000-25,000	\$25,000-50,000	Over 50,000	N
USMA AD	0%	0%	13%	83%	4%	0%	134
USMA NAD	0	0	8	38	38	15	39
USMA Total	1	0	13	68	14	4	329
Engineering & Science	0	1	18	55	23	3	1060
National Norm	1	7	27	45	17	3	5651

TABLE 6

POLITICAL PARTY PREFERENCE

Type of Institution	Republican	Democrat	Non-Partisan or No Specific Affiliation	Other	Prefer Not To Answer	N
USMA AD	53%	10%	35%	1%	2%	135
USMA NAD	79	3	15	3	0	39
USMA Total	57	9	30	2	2	328
Engineering & Science	62	16	21	1	0	1060
National Norm	54	24	20	1	1	5651

TABLE 7

RELIGIOUS IDENTIFICATION

Type of Institution	Catholic	Jewish	Protestant	No Formal Religion	No Definite Religious Beliefs	Other	Prefer Not to Answer	N
USMA AD	22%	2%	69%	4%	2%	2%	0%	131
USMA NAD	30	5	51	5	3	5	0	37
USMA Total	22	4	65	6	2	2	0	324
Engineering & Science	17	7	57	10	4	5	1	1060
National Norm	18	4	61	8	4	5	0	5651

TABLE 8

ACTIVITIES SCALES: COMMUNITY AFFAIRS

Percent of Alumni Obtaining Each Score

Type of Institution	0	1	2	3	4	5	6	7	8	9	10	11	12	<u>N</u>	<u>$\bar{X}$</u>	<u>S.D.</u>
USMA AD	1%	5%	10%	15%	19%	16%	13%	9%	6%	4%	0%	1%	0%	135	4.7	2.2
USMA NAD	3	0	3	10	8	10	13	8	13	13	13	8	0	39	6.8	2.8
USMA Total	1	4	8	14	16	15	11	10	10	4	4	2	0	330	5.2	2.5
Engineering & Science	1	1	3	7	14	16	13	15	12	8	6	5	1	1060	6.4	2.4
National Norm	1	1	2	5	12	13	13	14	12	10	9	8	1	5651	6.8	2.5

TABLE 9

ACTIVITIES SCALES: NATIONAL & STATE POLITICS

Percent of Alumni Obtaining Each Score

Type of Institution	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	<u>N</u>	<u>$\bar{X}$</u>	<u>S.D.</u>
USMA AD	0%	1%	1%	3%	15%	21%	37%	10%	8%	3%	0%	0%	0%	0%	0%	135	5.7	1.4
USMA NAD	0	0	0	0	8	5	18	18	18	13	5	8	3	5	0	39	7.8	2.3
USMA Total	0	1	1	3	14	16	28	17	10	5	2	1	2	1	0	330	6.2	1.9
Engineering & Science	0	0	1	2	5	10	25	22	16	9	4	3	2	1	1	1060	7.0	2.0
National Norm	0	0	1	2	4	8	21	23	17	10	6	4	3	1	1	5651	7.4	2.2

TABLE 10

ACTIVITIES SCALES: ART

Percent of Alumni Obtaining Each Score

Type of Institution	0	1	2	3	4	5	6	7	8	9	<u>N</u>	<u>$\bar{Y}$</u>	<u>S.D.</u>
USMA AD	18%	24%	18%	20%	7%	8%	6%	0%	0%	0%	135	2.2	1.8
USMA NAD	18	18	21	8	15	10	10	0	0	0	39	2.6	2.0
USMA Total	18	23	18	16	12	7	5	0	0	0	330	2.2	1.8
Engineering & Science	27	19	19	14	9	6	4	2	1	0	1060	2.1	1.9
National Norm	22	19	18	14	11	8	5	2	1	0	5651	2.4	2.0

TABLE 11

ACTIVITIES SCALES: LITERATURE

Percent of Alumni Obtaining Each Score

Type of Institution	0	1	2	3	4	5	6	7	8	9	<u>N</u>	<u>$\bar{X}$</u>	<u>S.D.</u>
USMA AD	6%	10%	17%	17%	15%	22%	9%	2%	2%	0%	135	3.5	1.9
USMA NAD	8	13	10	10	15	23	21	0	0	0	39	3.6	2.0
USMA Total	7	10	13	16	18	20	12	2	1	0	330	3.5	1.9
Engineering & Science	18	12	18	18	16	14	3	1	0	0	1060	2.7	1.9
National Norm	14	13	15	16	15	15	8	3	1	0	5651	3.0	2.0

TABLE 12

ACTIVITIES SCALES: EDUCATION

Percent of Alumni Obtaining Each Score

Type of Institution	0	1	2	3	4	5	6	7	8	9	10	<u>N</u>	<u>$\bar{X}$</u>	<u>S.D.</u>
USMA AD	1%	3%	4%	10%	23%	19%	18%	10%	7%	4%	1%	135	5.0	2.0
USMA NAD	0	3	5	3	13	21	21	18	13	3	3	39	5.7	1.9
USMA Total	1	3	6	7	18	21	18	12	8	5	1	330	5.2	2.0
Engineering & Science	1	2	5	10	15	21	20	17	8	2	0	1060	5.3	1.8
National Norm	1	2	4	7	11	18	21	19	11	6	2	5651	5.8	2.0

TABLE 13

ACTIVITIES SCALES: MUSIC

Percent of Alumni Obtaining Each Score

Type of Institution	0	1	2	3	4	5	6	7	8	9	10	11	$\bar{X}$	S.D.
USMA AD	2%	13%	22%	21%	19%	10%	7%	5%	0%	0%	1%	0%	135	1.8
USMA NAD	5	10	23	13	8	18	13	3	5	3	0	0	39	2.3
USMA Total	5	11	21	18	17	14	7	5	2	0	0	0	330	2.0
Engineering & Science	5	12	17	17	18	13	8	6	3	2	0	0	1060	2.2
National Norm	4	10	15	16	16	14	10	7	4	2	1	1	5651	2.3

TABLE 14

ACTIVITIES SCALES: DRAMA

Percent of Alumni Obtaining Each Score

Type of Institution	0	1	2	3	4	5	6	7	8	9	10	11	<u>N</u>	<u>$\bar{X}$</u>	<u>S.D.</u>
USMA AD	1%	11%	20%	15%	26%	15%	6%	4%	1%	0%	0%	0%	135	3.5	1.7
USMA NAD	8	3	5	28	23	15	10	5	3	0	0	0	39	3.8	1.9
USMA Total	5	9	17	18	22	14	8	5	2	0	0	0	330	3.6	1.9
Engineering & Science	6	10	18	25	17	12	8	2	1	0	0	0	1060	3.2	1.8
National Norm	5	9	16	24	19	13	7	4	2	1	0	0	5651	3.5	1.9

TABLE 15

ACTIVITIES SCALES: RELIGION

Percent of Alumni Obtaining Each Score

Type of Institution	0	1	2	3	4	5	6	7	8	9	<u>N</u>	<u>$\bar{X}$</u>	<u>S.D.</u>
USMA AD	3%	7%	13%	7%	11%	12%	15%	17%	11%	4%	135	4.9	2.4
USMA NAD	10	0	8	0	18	13	13	10	18	10	39	5.4	2.7
USMA Total	5	9	11	8	10	12	13	14	10	8	330	4.9	2.6
Engineering & Science	8	8	8	9	8	10	10	12	16	12	1060	5.1	2.9
National Norm	6	6	7	9	8	9	10	11	15	18	5651	5.5	2.9

TABLE 16

ACTIVITIES SCALES: INTERCULTURAL

Percent of Alumni Obtaining Each Score

Type of Institution	0	1	2	3	4	5	6	7	8	9	10	<u>N</u>	<u>$\bar{X}$</u>	<u>S.D.</u>
USMA AD	11%	7%	13%	15%	10%	13%	10%	7%	6%	5%	3%	135	4.2	2.8
USMA NAD	5	18	15	21	10	5	10	8	3	5	0	39	3.6	2.5
USMA Total	10	12	16	15	13	9	8	8	4	3	2	330	3.7	2.6
Engineering & Science	17	20	20	14	11	7	4	3	2	1	0	1060	2.6	2.2
National Norm	13	19	20	15	12	8	5	4	2	1	1	5651	2.8	2.2

TABLE 17

ACTIVITIES SCALES: SCIENCE

Percent of Alumni Obtaining Each Score

Type of Institution	0	1	2	3	4	5	6	7	8	9	10	<u>N</u>	<u>$\bar{X}$</u>	<u>S.D.</u>
USMA AD	5%	11%	11%	25%	16%	16%	8%	6%	1%	1%	0%	135	3.6	2.0
USMA NAD	5	3	10	13	31	8	8	15	3	3	3	39	4.5	2.3
USMA Total	4	8	10	21	18	14	10	8	4	2	2	330	4.1	2.2
Engineering & Science	2	4	6	15	17	14	15	10	7	6	4	1060	5.1	2.4
National Norm	4	6	11	22	17	12	9	6	5	4	3	5651	4.3	2.4

53 67 67

0000

TABLE 18

ACTIVITIES SCALES: INTERNATIONAL

Percent of Alumni Obtaining Each Score

Type of Institution	0	1	2	3	4	5	6	7	8	9	<u>N</u>	<u>$\bar{X}$</u>	<u>S.D.</u>
USMA AD	1%	1%	31%	26%	19%	13%	5%	2%	1%	0%	135	3.4	1.4
USMA NAD	3	0	31	41	13	5	8	0	0	0	39	3.1	1.3
USMA Total	1	2	31	29	16	13	5	2	1	0	330	3.3	1.4
Engineering & Science	3	7	51	24	9	4	1	1	0	0	1060	2.5	1.2
National Norm	3	7	44	26	11	5	2	1	0	0	5651	2.7	1.3

TABLE 19

CHANGING SOCIETY: OCCURRING

Percent of Alumni Obtaining Each Score

Type of Institution	0-2	3-5	6-8	9-11	12-14	15-17	18-20	21-23	24-26	27-28	<u>N</u>	<u>$\bar{X}$</u>	<u>S.D.</u>
USMA AD	0%	0%	0%	2%	10%	25%	35%	24%	3%	1%	135	18.3	3.3
USMA NAD	0	0	0	3	3	21	44	28	3	0	39	19.0	2.8
USMA Total	0	0	1	4	11	24	35	21	5	0	330	18.2	3.6
Engineering & Science	1	0	1	4	11	27	28	19	8	1	1060	18.1	4.1
National Norm	0	0	1	3	9	21	30	25	10	1	5651	18.9	4.0

TABLE 20

CHANGING SOCIETY: DESIRABLE

Percent of Alumni Obtaining Each Score

Type of Institution	0-1	2-3	4-5	6-7	8-9	10-11	12-13	14	<u>N</u>	<u>$\bar{X}$</u>	<u>S.D.</u>
USMA AD	1%	8%	13%	30%	28%	14%	6%	0%	135	7.3	2.5
USMA NAD	0	8	21	13	28	15	5	0	39	7.3	2.8
USMA Total	2	6	15	30	29	15	4	0	330	7.3	2.5
Engineering & Science	2	8	17	28	27	16	3	0	1060	7.1	2.6
National Norm	2	8	17	27	26	16	5	0	5651	7.2	2.7

TABLE 21

VIEWPOINTS: GOVERNMENT

Percent of Alumni Obtaining Each Score

Type of Institution	0	1	2	3	4	<u>N</u>	<u>$\bar{X}$</u>	<u>S.D.</u>
USMA AD	7%	19%	44%	27%	4%	135	2.0	1.0
USMA NAD	10	28	44	13	5	39	1.7	1.0
USMA Total	6	23	39	24	8	330	2.0	1.0
Engineering & Science	9	26	31	25	9	1060	2.0	1.1
National Norm	9	24	32	25	12	5651	2.1	1.1

TABLE 22

VIEWPOINTS: WOMEN

Percent of Alumni Obtaining Each Score

Type of Institution	0	1	2	3	4	$\bar{X}$	$\underline{N}$	$\underline{S.D.}$
USMA AD	4%	21%	32%	37%	6%	2.2	135	1.0
USMA NAD	8	18	36	28	10	2.2	39	1.0
USMA Total	4	22	32	33	8	2.2	330	1.0
Engineering & Science	6	20	34	30	10	2.2	1060	1.1
National Norm	5	19	33	33	10	2.2	5651	1.0

TABLE 23
VIEWPOINTS: CIVIL RIGHTS

Percent of Alumni Obtaining Each Score

Type of Institution	0	1	2	3	4	5	<u>N</u>	<u>$\bar{X}$</u>	<u>S.D.</u>
USMA AD	4%	9%	30%	27%	25%	4%	135	2.7	1.2
USMA NAD	5	23	21	26	21	5	39	2.3	1.3
USMA Total	6	14	27	27	20	6	330	2.6	1.3
Engineering & Science	7	18	20	22	19	14	1060	2.7	1.5
National Norm	7	15	21	21	19	16	5651	2.8	1.5

TABLE 24
EDUCATIONAL BENEFITS: VOCATIONAL

Percent of Alumni Obtaining Each Score

Type of Institution	0	1	2	3	4	$\bar{X}$	$\frac{S.D.}{\bar{X}}$
USMA AD	24%	32%	21%	13%	10%	1.5	1.3
USMA NAD	33	26	23	13	5	1.3	1.2
USMA Total	30	29	22	14	6	1.4	1.2
Engineering & Science	36	27	21	12	4	1.2	1.2
National Norm	42	27	19	9	3	1.0	1.1

TABLE 25

EDUCATIONAL BENEFITS: PERSONAL & SOCIAL

Percent of Alumni Obtaining Each Score

Type of Institution	0	1	2	3	4	5	<u>N</u>	<u>$\bar{X}$</u>	<u>S.D.</u>
USMA AD	19%	22%	26%	18%	7%	7%	135	1.9	1.5
USMA NAD	18	26	21	13	15	8	39	2.0	1.6
USMA Total	21	24	22	17	10	6	330	1.9	1.5
Engineering & Science	63	21	9	4	2	1	1060	0.6	1.0
National Norm	52	21	13	8	4	3	5651	1.0	1.3

TABLE 26

EDUCATIONAL BENEFITS: LIBERAL EDUCATION

Percent of Alumni Obtaining Each Score

Type of Institution	0	1	2	3	4	5	6	7	<u>N</u>	<u>$\bar{X}$</u>	<u>S.D.</u>
USMA AD	20%	12%	17%	23%	17%	7%	3%	1%	135	2.4	1.8
USMA NAD	10	18	15	23	21	5	5	3	39	2.7	1.8
USMA Total	21	15	17	18	18	5	3	2	330	2.3	1.8
Engineering & Science	26	28	30	10	3	2	0	0	1060	1.5	1.3
National Norm	33	24	20	11	6	4	2	1	5651	1.6	1.6

TABLE 27

MEMORY OF COLLEGE EXPERIENCE: PEERS

Percent of Alumni Obtaining Each Score

Type of Institution	0	1	2	3	4	5	6	7	8	$\bar{N}$	$\bar{X}$	S.D.
USMA AD	8%	21%	18%	23%	19%	9%	1%	1%	0%	135	2.6	1.6
USMA NAD	3	23	15	31	18	8	3	0	0	39	2.7	1.4
USMA Total	8	20	18	25	17	8	2	1	0	330	2.6	1.6
Engineering & Science	23	29	21	14	8	4	1	0	0	1060	1.7	1.5
National Norm	17	27	22	17	10	5	2	1	0	5651	2.0	1.6

TABLE 28

MEMORY OF COLLEGE EXPERIENCE: ACADEMIC

Percent of Alumni Obtaining Each Score

Type of Institution	0	1	2	3	4	5	<u>N</u>	<u>$\bar{X}$</u>	<u>S.D.</u>
USMA AD	20%	22%	19%	20%	4%	4%	135	1.7	1.4
USMA NAD	23	21	23	23	10	0	39	1.8	1.3
USMA Total	22	32	19	19	5	3	330	1.6	1.3
Engineering & Science	13	25	26	21	11	3	1060	2.0	1.3
National Norm	11	19	24	23	14	8	5651	2.3	1.4

TABLE 29.

PERSONAL TRAITS: AUTONOMY SCALE

Percent of Alumni Obtaining Each Score

Type of Institution	0	1	2	3	4	5	6	7	8	9	10	11	12	<u>N</u>	<u>$\bar{X}$</u>	<u>S.D.</u>
USMA AD	1%	4%	13%	17%	23%	16%	16%	8%	2%	0%	0%	0%	0%	135	4.2	1.8
USMA NAD	0	5	5	13	21	21	13	13	5	5	0	0	0	39	4.9	2.0
USMA Total	1	4	12	16	23	17	14	9	3	2	1	0	0	330	4.5	1.9
Engineering & Science	1	2	5	9	13	17	18	16	9	7	2	1	0	1060	5.7	2.2
National Norm	1	3	7	11	15	16	15	13	9	7	2	1	0	5651	5.4	2.3

TABLE 30

PERSONAL TRAITS: COMPLEXITY

Percent of Alumni Obtaining Each Score

Type of Institution	0-1	2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-17	18-19	20-21	<u>N</u>	<u>$\bar{X}$</u>	<u>S.D.</u>
USMA AD	0%	1%	2%	7%	13%	21%	22%	21%	10%	2%	0%	135	11.9	3.2
USMA NAD	0	0	3	3	10	23	23	13	23	3	0	39	12.6	3.2
USMA Total	0	0	4	7	13	20	22	18	14	2	1	330	12.0	3.4
Engineering & Science	0	0	2	5	12	20	21	20	14	6	1	1060	12.0	3.4
National Norm	0	1	2	6	12	20	21	19	13	6	1	5651	12.0	3.5

TABLE 31
PERSONAL TRAITS: THEORETICAL ORIENTATION

Percent of Alumni Obtaining Each Score

Type of Institution	0-1	2-3	4-5	6-7	8-9	10-11	12-13	14-15	16	N	$\bar{X}$	S.D.
USMA AD	0%	5%	13%	24%	28%	21%	5%	4%	0%	135	8.0	2.8
USMA NAD	0	13	18	3	13	23	18	13	0	39	9.0	4.0
USMA Total	0	7	12	21	25	19	10	6	0	330	8.4	3.1
Engineering & Science	0	5	12	19	24	18	12	8	1	1060	8.7	3.3
National Norm	1	9	16	21	21	16	10	5	1	5651	7.9	3.4